

CV-Dr. Prashant K. Srivastava

CONTACT INFORMATION

Dr. Prashant K. Srivastava (PhD-Bristol,UK)
Assistant Professor
Institute of Environment and Sustainable Development
Banaras Hindu University, India
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Previous Positions

Research Scientist, Hydrological Sciences, NASA GSFC, Greenbelt, Maryland, USA
Commonwealth Fellow, Department of Civil Engineering, University of Bristol, Bristol, UK
Assistant Professor, NVPAS, Sardar Patel University, Anand, Gujarat, India

RESEARCH INTERESTS

Mesoscale and Hydrological Modelling, Microwave soil moisture retrieval, Radar precipitation retrieval, Optical/IR/Hyperspectral remote sensing, Evapo-transpiration, Sensitivity and Uncertainty analysis, Land use modelling, Natural Disasters

EDUCATION

Doctor of Philosophy, Civil Engineering (3 years)

Department of Civil Engineering, University of Bristol, Bristol, England, U.K., BS8 1TR

- Thesis title: ***Soil Moisture Estimation from SMOS Satellite and Mesoscale Model for Hydrological Applications***
- The PhD is Sponsored and funded by British High Commission, U.K. under the ***Commonwealth Scholarship and Fellowship Plan*** (CSFP).

M.Phil in Remote sensing and Hydrology (1 year)

School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India

- Project-Estimation of cotton growing areas and yield in Bhatinda District and adjoining areas of Punjab using multi-spectral satellite data and groundwater optimization funded by DST, India

Master of Science, Environmental Sciences (2 years)

School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India

- Dissertation project rated as one of the best research works performed by final year students, scored A+ recognized and registered at World Tropical Soil Biofertility Programme (TSBF) annexure pp 281. Website: www.ciat.cgiar.org/tsbf_institute/pdf/report_2006/annexes.pdf

Bachelor of Science, Agricultural Sciences (4 years)

Institute of Agricultural Sciences, Banaras Hindu University, Varanasi

- Dissertation project is sponsored & funded by Indian Council of Agricultural Research (ICAR) on soil and water health assessment.

TEACHING EXPERIENCE

Assistant Professor

IESD, Banaras Hindu University, Varanasi, India

2015--Continued

Assistant Professor

Environmental Sciences, NVPAS, Sardar Patel University, Anand, Gujarat, India

2007--2010

Affiliated Faculty/Visiting Scientist/Science Collaborator

- Hydrological Sciences (Code 617), NASA GSFC, Maryland, USA
- BCC NOAA-CREST Geospatial Center, The City University of New York, New York, NY, USA.

- Department of Geography and Earth Sciences, University of Aberystwyth, Wales, U.K.
- Department of Civil Engineering, University of Malaya, Malaysia
- ADIT Institute of Technology, Vallabh Vidyanagar, Anand, Gujarat, India

Teaching Support/Assistant

Department of Civil Engineering, University of Bristol, Bristol, UK

RESEARCH EXPERIENCE

Visiting Research Scientist

- NASA Goddard Space Flight Center and Jet Propulsion Laboratory, USA (March-June 2016)
SMAP soil moisture retrieval and algorithm development, Calibration and Validation

Working Group Partner

- NASA JPL, Pasadena, USA: SMAP Calibration and Validation (2015-2017)

Research Scientist

- Hydrological Sciences, NASA Goddard Space Flight Center, Greenbelt, Maryland, USA (2013-2015)
SMAP soil moisture retrieval and algorithm development, downscaling and assimilation for hydrological applications

Research Associate

- ESSIC, University of Maryland, College Park, USA: Satellite soil moisture modeling and simulation from microwave satellite (2013)

CSIR-UGC-Research Fellow (2006-2007)

- Council of Scientific and Industrial Research - University Grant Commission Junior Research Fellow for project Remote sensing application in groundwater modeling and optimization from Jawaharlal Nehru University, New Delhi, India.

Research Assistant (2006-2007)

- Jawaharlal Nehru University, New Delhi, India
- Project-Estimation of cotton growing areas and yield in Bhatinda District and adjoining areas of Punjab using multi-spectral satellite data and groundwater optimization
- Funded by **DST (Department of Science and Technology)**, Government of India.

Research Assistant (2006-2007)

- Jawaharlal Nehru University, New Delhi, India
- Project-Working Experimental Prototype for Land use, Landforms and Soil Characterization of Punjab and Rajasthan by using Satellite Data funded by **DTRL (Defence Terrain Research Laboratory)**, **DRDO**, Government of India. The work involved delineation of Land use/Land cover maps using satellite data, soil physical and chemical analysis, on-site samplings, GIS modeling and report writings.

Research Assistant (2006-2007)

- Project-Thematic Layers and Their Characterization by using Satellite data of West Bengal, M.P. and Bihar, funded by **NIC (National Informatics Centre)**, India. The work involved Land use database creation under geo-spatial platform using high resolution satellite data along with geographical information system for national resource management.
- Project-Rainwater Harvesting and geology of JNU, funded by **JNU**, **UPOE**, India. The work included field data collection involving the resistivity data, magnetometer data and soil physical analysis integrated with high resolution satellite data to delineate rainwater harvesting sites within JNU campus and also delineation of groundwater recharge zones.

OVERSEAS VISIT

- 4 months, 1 March 2016 to 29 June 2016, NASA Jet Propulsion Laboratory and GSFC, USA as visiting scientist on recently launched SMAP mission calibration and validation. Group Leader: Peggy O'Neill, SMAP Deputy Director, NASA GSFC
- 3 days, 1-3 June 2016, at NASA Goddard Space Flight Center, Maryland, USA, for paper presentation at HyspIRI Symposium
- 1 week, 13-17 June 2016, NASA GSFC, Maryland, USA, Python BootCamp (PBC2016) for training on python language
- 1 week, April 17-22 April, 2016, Vienna, Austria, as Co-convenor of the session Hydroinformatics: computational intelligence, uncertainty, systems analysis, optimisation, data science, and data-driven modelling of social-hydrologic systems, EGU General Assembly-2016
- 1 week, 14-18 Dec 2015, AGU Fall Meeting, San Francisco, USA, 2015 for paper presentation
- 1 week, April 12-17, 2015, Vienna, Austria Co-convenor of the session *Uncertainty, Sensitivity Analysis* and Efficient Diagnostics in *Geosciences*, EGU General Assembly-2015
- 1 week, May 11-15, 2015, Berlin, Germany for paper presentation at 36th International Symposium on Remote Sensing of Environment
- 3 days, June 4-5, 2014, NASA Goddard Space Flight Center, Maryland, USA for training on Processing Routines in IDL for Spectroscopic Measurements (PRISM), HyspIRI, Product Symposium
- 1 week, Apr 27, 2014 - May 2, 2014, Vienna, Austria as Co-convenor of the session Uncertainty & Sensitivity Analysis in Geosciences, , EGU General Assembly-2014
- 1 week, August 17-21, 2014, New York, USA as chairperson of the session Remote Sensing and LiDAR Data: Products relevant to Hydrology in 11th International Conference on Hydroinformatics.
- 4 days, August 26-28, 2014, Gatineau-Ottawa Canada as Scientific Committee Member, International Conference on Water, Informatics, Sustainability and Environment: iWISE 2014.
- 3 days, 12-13 November 2013, College Park, Maryland, USA in GPM Applications Workshop, NOAA Centre for climate and weather prediction.
- 18 months, 26 August 2013-19 Feb 2015, NASA Goddard Space Flight Center, Maryland, USA as research scientist for soil moisture retrieval algorithm development and simulation for recently launched SMAP mission. Group Leader: Peggy O'Neill, SMAP Deputy Director, NASA GSFC
- 1 week, 15-17 April 2013, IFREMER, Brest, France, for paper presentation at SMOS and Aquarius science workshop
- 1 week, 25-27 February 2013, ESA-ESRIN, Frascati, Italy for paper presentation at SMOS land application workshop
- 1 week, 27-31 May 2013, CESBIO and CNES, Toulouse, France for training on SMOS satellite soil moisture retrieval.
- 1 week, 22-25 October 2012, Delft, Netherlands for paper presentation at Prediction in Ungauged basin (PUBS) symposium co-organized by Delft University of Technology, and IAHS.
- 32 months, 1 Oct 2010-18 Aug 2013, Bristol, UK for PhD in remote sensing technology funded by British High Commission, UK and nominated by Ministry of Human Resource Development, Government of India. Supervisor: Prof. Dawei Han and Miguel A. Rico-Ramirez

AWARDS/SCHOLARSHIPS

1. DST young scientist early career award, 2016, India
2. Visiting scientist award, NASA Goddard Space Flight Center and Jet Propulsion Laboratory, USA (March-June 2016)
3. NASA JPL working group partner: SMAP calibration and validation (2015-2017)
4. Best Poster Award, Selection of spatial interpolation techniques for soil moisture estimation, National Conference on Managing Soil Resources for Environmental Sustainability: Challenges & Perspectives, 9-10 December 2016, IESD, Banaras Hindu University, India
5. Morphometric analysis of Mahi River basin for water resource management using Remote Sensing and GIS. National Conference on Emerging Scenarios of Ganga, River Development & Water Resource Management, February 28th-1st March, 2017, IESD, Banaras Hindu University, India
6. NASA GSFC Fellowship: SMAP satellite soil moisture retrieval algorithm development, instrumentation and simulation (2013-2015)
7. University of Maryland Fellowship-2013 at Earth System Science Interdisciplinary Center, College Park, Maryland, USA
8. Commonwealth Scholarship and Fellowship-2010 by British High Commission, U.K. in remote sensing technology.
9. Awarded certificate of Appreciation by Charutar Vidya Mandal to acknowledge efforts in bringing the honour of achieving A grade in NAAC Accreditation to NVPAS, Sardar Patel University, Anand, Gujarat.

10. Selected for fellowship by Ministry of Human Resource and Development (MHRD), Government of India, New Delhi for PhD at Indian Institute of Technology (IIT) Roorkee.
11. Council of Scientific and Industrial Research (CSIR)- University Grant Commission (UGC) Junior Research Fellowship (JRF) and National Eligibility Test (NET) for Lectureship, Dec- 2006
12. University Grant Commission (UGC)-National Eligibility Test (NET) for Lectureship, in “Environmental Sciences”, June -2006
13. Council of Scientific and Industrial Research (CSIR)-Junior Research Fellowship(JRF) and National Eligibility Test(NET) for Lectureship, June -2005

CURRENT PROJECTS:

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1. NASA GSFC: Role Science Collaborator. *Soil moisture retrieval and simulation for soil from SMAP satellite.*
 2. NASA JPL: Working group partner, SMAP calibration and validation
 3. Department of Science and Technology: Role PI on long term monitoring of precipitation and evapotranspiration for discharge prediction in selected catchments of kosi river basin.
 4. BHU Seed Grant: Role PI on *Weather Research and Forecasting model for hydrological applications.*
 5. Design and Innovation Centre (BHU and IIT-BHU), Ministry of Human Resource Development, Government of India: Role Principal PI *Developing android app for real time estimation and visualization of irrigation water demand.*
 6. Ministry of Education, Malaysia: Role Co-PI. *Long term precipitation and discharge trend modelling using hybrid satellite products for peninsular Malaysia*, in collaboration with University of Malaya, Malaysia.
 7. High Performance Computing Facilities (HPC) Wales, UK: PREMIER-EO. Role: Co- PI. Research on the evaluation of existing EO-based operational products for the estimation of evapotranspiration rates (ET) and soil moisture as well on the prototyping the estimation of those parameters.
 8. UGC, Government of India: Role: Science Collaborator. *Geochemical investigation of the Ganges river system integrated with satellite based land use modelling* in collaboration with KBCAOS, University of Allahabad, India.

TRAINING CERTIFICATES

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1. NASA GSFC Python BootCamp (PBC2016) for training on python language, Greenbelt, Maryland, USA, 13-17 June 2016
 2. URSI – One Week Workshop on Microwave Engineering Essentials for Multiparameter Radar Remote Sensing, International Centre for Radio Science, Jodhpur, March 23-28, 2015
 3. Training on Processing Routines in IDL for Spectroscopic Measurements (PRISM), HypSIRI, Product Symposium, June 6, 2014, Sponsored by NASA Goddard Space Flight Center, Greenbelt, USA
 4. Training on SMOS satellite soil moisture retrieval, CESBIO and CNES, Toulouse, France, 27-31 May 2013
 5. Green Impact Environmental Audit Training, University of Bristol, Bristol, UK, 2012
 6. Certificate in Teaching and Learning in Higher Education (TLHE), Graduate School of Education, University of Bristol, Bristol, UK, 2011
 7. Training in microwave data analysis, techniques and application, 16th to 17th December, 2008, organized by Space Application Centre, Indian Space Research Organization, Ahmedabad, India
 8. National Level One Week Short Term Training Programme (STTP) on "Emerging Research Areas in Image Processing" November, 30 to December 4, 2009 organized by Electronics and Communication Department of LDRP Institute of Technology and Research, Gandhinagar, India
 9. Workshop on Industrial Health and Hygiene, conducted by Institute of Industrial Health and Hygiene, ISTAR, Vallabh Vidyanagar, Gujarat, 19th Sep' 2009
 10. Training in Comprehensive National Disaster Risk Management Framework, Apr 9 to May 21, 2007, from World Bank Institute in partnership with National Institute of Disaster Management
 11. Department of Science and Technology, Government of India short term training course on “Mathematical Modeling of Ground Water Flow and Mass transport through theory and hands on training,” organized by School of Environmental Sciences, J.N.U., New Delhi (12th November to 9th December, 2004)
 12. Training on Soil and water Quality Assessment, Banaras Hindu University (2004) under RAWE, Indian Council of Agricultural Research (ICAR), India
 13. Training on Heavy metal detection (Zinc, Cadmium, Mercury, Lead, Manganese, Cobalt, Chromium, Iron, Nickel), 2002

SERVICES

Admin Duty

- Core Team member, Design and Innovation Centre, Ministry of Human Resource Development, Government of India (2015-2018)
- Examination panel of University as Paper setter and Examiner at Banaras Hindu University, Varanasi, India (2015 onwards).
- Coordinator, International Satellite Soil Moisture group, Department of Civil Engineering, University of Bristol, Bristol, UK (2010-2013)
- Examination panel of University as Paper setter and Examiner for Environmental Sciences at Sardar Patel University, Anand, Gujarat (2008-2010).
- Criterion committee member for Classroom teaching, Internal and External Communication for ISO (2007-2010).
- Criterion committee member of Teaching-learning and Evaluation for NAAC Accreditation programme of the NVPAS, Sardar Patel University (2007-2010).
- Ex-officio of Nature Club, NVPAS, Sardar Patel University, Anand, Gujarat, India. The works were related to conservation of nature, involved activities for protection and conservation of Environment all the year round (Articles published in reputed news papers). Activities involved in this portfolio are intercollegiate competition, awareness programme, Poster making competition, extension programme in villages etc related to conservation of environment (2007-2010).
- Counselor for NVPAS, Sardar Patel University Environmental sciences students (2007-2010).

Invited steering committee member/Conference Organized

- Co-convenor in the Session-HS 3.1: Hydroinformatics: computational intelligence, uncertainty, systems analysis, optimisation, data science, and data-driven modelling of social-hydrologic systems. EGU-2016, Vienna, Austria
- National workshop on “Hyperspectral Remote Sensing of Natural Resources”, MS University of Baroda, Baroda, Gujarat, India Oct 2015.
- Co-convenor in the Session-GII.7/NP1.5: Uncertainty & Sensitivity Analysis in Geosciences, EGU-2015, Vienna, Austria
- Chairperson of the session Remote Sensing and LiDAR Data: Products relevant to Hydrology, 11th International Conference on Hydroinformatics, August 17-21, 2014, New York, USA
- Scientific Committee Member, International Conference on Water, Informatics, Sustainability and Environment: iWISE 2014”, August 26 - 28, 2014, at Canadian Museum of Civilization, Gatineau-Ottawa Canada
- Advisory Committee Member, 1st International Conference on Advances in Engineering, SITICAiE-2014, 22nd -23rd January 2015, Saffrony Institute of Technology, Gujarat, India
- Co-convenor in the Session-GII.7/NP1.5) 2014: Uncertainty & Sensitivity Analysis in Geosciences, Apr 27, 2014 - May 2, 2014, Vienna, Austria
- Organized a National level seminar with NVPAS, Sardar Patel University on “New frontiers in Life Sciences” dated 19th Dec 2009, Gujarat, India
- Organized a State level seminar with NVPAS, Sardar Patel University on “Current trends in Environmental Sciences” dated 20th September, 2008, Gujarat, India
- Organized a National level seminar with NVPAS, Sardar Patel University on “New Horizons in Biological Sciences” dated 23rd September, 2007, Gujarat, India

Journal Editor

- Associate Editor: Journal of Hydrology, Elsevier
- Associate Editor: Hydrological Sciences Journal, Taylor and Francis
- Associate Editor: Journal of Earth System Science (Indian Academy of Science and Springer)
- Associate Editor: Environment, Development and Sustainability (Springer)
- Environmental Processes (Springer and European Water Resource Association)
- Remote Sensing-MDPI
- Guest Editor: Journal Physics and Chemistry of Earth A/B/C (Elsevier)
- Editorial Board member, Journal of Remote Sensing technology (Bowen Publishing, New York, USA)
- International journal of sustainable land use and urban planning (Science Target, Canada)
- Editor-in-Chief: Bulletin of Environmental and Scientific Research (HEMS, Nepal and BHU, India)

Journal Reviewer

- Remote Sensing of Environment; Journal of Hydrology; Journal of Hydrometeorology; Water Resources Research; Hydrological Processes; Agricultural Water Management; Water Resource Management; Water Science and Technology; Water Science and Technology- Water Supply; Science of Total Environment; International Journal of

Remote Sensing; Hydrology Research; Remote Sensing Letters; IEEE Trans. on Journal of Selected Topics in Applied Earth Observations and Remote Sensing (IEEE-JSTARS); IEEE Transaction of Geosciences and Remote Sensing ; IEEE Sensors; MDPI Remote Sensing; MDPI Sensors; Journal of Environmental management; Journal of Contaminant hydrology; Environmental Earth Sciences; International Journal of Climatology; Environmental Modeling and Software; Journal of Applied Remote Sensing ; Water Air and Soil Pollution; Water and Environment Journal; Environmental Monitoring and Assessment; Hydrological Sciences Journal; Journal of Soil Science; Urban Water Journal and *Several others*

SKILLS

- Computing and Programming: MATLAB, R language, Linux/Unix, Fortran, ArcGIS, ENVI, ERDAS, AutoCAD
- Mesoscale Modelling: Weather Research and Forecasting Model, NOAA LSM, MM5
- Physical and Numerical models: 6S radiative transfer model (Second Simulation of a Satellite Signal in the Solar Spectrum), SWAT, IHACRES, TOP model, Probability Distribution model (PDM)
- Artificial Intelligence Techniques
- Statistical analysis, mathematical modeling, and large data handling
- Ability to work independently and as part of a team with excellent cross-disciplinary communication skills

PROFESSIONAL ASSOCIATIONS/LIFE MEMBERSHIPS

- Environmental Water Resources Institute (EWRI)
- American Society of Civil Engineers (ASCE)
- Indian Society of Geomatics (ISG)
- Indian Society of Remote Sensing (ISRS)
- Indian Association of Hydrologists (IAH),
- International Society for Agrometeorology (INSAM)
- Indian Meteorological Society (IMS)
- International Association of Hydrological Sciences (IAHS)
- Chartered Institution of Water and Environmental Management (CIWEM)

PUBLICATIONS

1. Vegetation water content retrieval using scatterometer data at X-band. Geocarto International (just-accepted): 1-22, 2017. Kumar Gupta, D., Prasad, R., Kumar, P., Kumar Vishwakarma, A. and **Prashant K. Srivastava**
2. Support vector machines and generalized linear models for quantifying soil dehydrogenase activity in agro-forestry system of mid altitude central Himalaya. *Environmental Earth Sciences* 75, no. 4 (2016): 1-15. **Prashant K. Srivastava**, Aradhana Yaduvanshi, Sudhir Kumar Singh, Tanvir Islam, and Manika Gupta
3. SWAT Model calibration and uncertainty analysis for streamflow prediction of the Tons River Basin, India, using Sequential Uncertainty Fitting (SUFI-2) algorithm. *Modeling Earth Systems and Environment*, 3(1): 30, 2017. Kumar, N., Singh, S.K., **Prashant K. Srivastava** and Narsimlu, B.,
4. Floodplain Mapping through Support Vector Machine and Optical/Infrared Images from Landsat 8 OLI/TIRS Sensors: Case Study from Varanasi. *Water Resources Management*: 1-15, 2017. Nandi, I., **Prashant K. Srivastava** and Shah, K.,
5. Dual-polarimetric C-band SAR data for land use/land cover classification by incorporating textural information. *Environmental Earth Sciences*, 76(1): 26, 2017. Mishra, V.N., Prasad, R., Kumar, P., Gupta, D.K. and **Prashant K. Srivastava**
6. Trend and variability of atmospheric ozone over middle Indo-Gangetic Plain: impacts of seasonality and precursor gases. *Environmental Science and Pollution Research*, 24(1): 164-179, 2017. Shukla, K., **Prashant K. Srivastava**, Banerjee, T. and Aneja, V.P.,
7. Delineation and classification of rural-urban fringe using geospatial technique and onboard DMSP-Operational Linescan System. Geocarto International (just-accepted): 1-37, 2016. Mustak, S., Baghmar, N.K., **Prashant K. Srivastava**, Singh, S.K. and Binolakar, R.,
8. Uncertainty Quantification in the Infrared Surface Emissivity Model (ISEM), *IEEE Journal of Selected Topics in Applied Earth Observations And Remote Sensing (JSTARS)*, DOI 10.1109/JSTARS.2016.2557303. Tanvir Islam, **Prashant K. Srivastava**, George P. Petropoulos
9. Operational evapotranspiration estimates from SEVIRI in support of sustainable water management. *International Journal of Applied Earth Observation and Geoinformation* 49 (2016): 175-187. Petropoulos, George P., Gareth

- Ireland, Salim Lamine, Hywel M. Griffiths, Nicolas Ghilain, Vasileios Anagnostopoulos, Matthew R. North, **Prashant K. Srivastava**, and Hro Georgopoulou.
10. Special Issue on "Emerging science and applications with microwave remote sensing data". *Physics and Chemistry of the Earth, Parts A/B/C*, , 83, (2015), 1. Islam, T., **Prashant K. Srivastava**, Hajnsek, I., Benveniste, J., & Ge, L..
 11. A statistical significance of differences in classification accuracy of crop types using different classification algorithms. *Geocarto International* accepted (2015): 1-34. Kumar, Pradeep, Rajendra Prasad, Arti Choudhary, Varun Narayan Mishra, Dileep Kumar Gupta, and **Prashant K. Srivastava**.
 12. Land use\land cover classification using Sentinel-1 imagery and Support Vector Machines, *Bulletin of Environment and Scientific Research*. (2016) Swati Suman and **Prashant K. Srivastava** (Accepted).
 13. Book Review - Biophysical Applications of Satellite Remote Sensing, *Sensed*, 59, (2016). Swati Suman and **Prashant K. Srivastava**
 14. Satellite radiance assimilation using a 3DVAR assimilation system for hurricane Sandy forecasts." *Natural Hazards* (2016): 1-11. Islam, Tanvir, **Prashant K. Srivastava**, Dinesh Kumar, George P. Petropoulos, Qiang Dai, and Lu Zhuo.
 15. Performance evaluation of WRF-Noah Land surface model estimated soil moisture for hydrological application: Synergistic evaluation using SMOS retrieved soil moisture. *Journal of Hydrology*, 529, (2015),200-212. **Prashant K. Srivastava**, D Han, MA Ramirez, P O'Neill, T Islam, M Gupta, Q Dai,
 16. Rain Rate Retrieval Algorithm for Conical-Scanning Microwave Imagers Aided by Random Forest, RReliefF, and Multivariate Adaptive Regression Splines (RAMARS). *Sensors Journal*, IEEE, 15 (4), (2015), 2186-2193. T Islam, **Prashant K. Srivastava**, Q Dai, M Gupta, L Zhuo,
 17. Assessment of SMOS soil moisture retrieval parameters using tau-omega algorithms for soil moisture deficit estimation. *Journal of Hydrology*, 519, (2015), 574–587. **Prashant K. Srivastava**, Dawei Han, Miguel Rico-Ramirez, Peggy O Neill, Tanvir Islam, Manika Gupta
 18. Reduced major axis approach for correcting GPM/GMI radiometric biases to coincide with radiative transfer simulation. *Journal of Quantitative Spectroscopy and Radiative Transfer*, 168, (2015), 40-45. T Islam, **Prashant K. Srivastava**, GP Petropoulos, SK Singh
 19. Precipitation trend analysis of Sindh River basin, India, from 102-year record (1901–2002). *Atmospheric Science Letters*, (2015). S Gajbhiye, C Meshram, SK Singh, **Prashant K. Srivastava**, T Islam
 20. Appraisal of NLDAS-2 Multi-Model Simulated Soil Moistures for Hydrological Modelling. *Water Resources Management*, (2015), 1-15. L Zhuo, D Han, Q Dai, T Islam, **Prashant K. Srivastava**
 21. SWAT Model Calibration and Uncertainty Analysis for Streamflow Prediction in the Kunwari River Basin, India, Using Sequential Uncertainty Fitting. *Environmental Processes* 2 (1), (2015), 79-95. B Narsimlu, AK Gosain, BR Chahar, SK Singh, **Prashant K. Srivastava**
 22. WRF Dynamical Downscaling and Bias Correction Schemes for NCEP Estimated Hydro-Meteorological Variables. *Water Resources Management* 29 (7), (2015), 2267-2284. **Prashant K. Srivastava**, T Islam, M Gupta, G Petropoulos, Q Dai
 23. Seasonal evaluation of evapotranspiration fluxes from MODIS satellite and mesoscale model downscaled global reanalysis datasets. *Theoretical and Applied Climatology*, (2015), 1-13. **Prashant K. Srivastava**, D Han, T Islam, GP Petropoulos, M Gupta, Q Dai
 24. Integrating TRMM and MODIS satellite with socio-economic vulnerability for monitoring drought risk over a tropical region of India. *Physics and Chemistry of the Earth, Parts A/B/C*. (2015) A Yaduvanshi, **Prashant K. Srivastava**, AC Pandey
 25. Soil characterization based on land cover heterogeneity over a tropical landscape: an integrated approach using earth observation data-sets. *Geocarto International* 30 (2), (2015), 218-241. D Paudel, JK Thakur, SK Singh, **Prashant K. Srivastava**.
 26. Variational Bayes and the Principal Component Analysis Coupled With Bayesian Regulation Backpropagation Network to Retrieve Total Precipitable Water (TPW) From GCOM-W1/AMSR2. *IEEE-JSTARS*. (2015), T Islam, **Prashant K. Srivastava**, GP Petropoulos
 27. Assessing the influence of atmospheric and topographic correction and inclusion of SWIR bands in burned scars detection from high-resolution EO imagery: a case study using ASTER. *Natural Hazards*, (2015), 1-20. YA Said, GP Petropoulos, **Prashant K. Srivastava**,
 28. SK Landscape transform and spatial metrics for mapping spatio-temporal land cover dynamics using Earth Observation datasets. *Geocarto International*, (2015), 1-34 Singh, **Prashant K. Srivastava**, S Szabó, GP Petropoulos, M Gupta, T Islam
 29. Urban vegetation cover extraction from hyperspectral imagery and geographic information system spatial analysis techniques: case of Athens, Greece. *Journal of Applied Remote Sensing* 9 (1), (2015).096088-096088. GP Petropoulos, DP Kalivas, IA Georgopoulou, **Prashant K. Srivastava**
 30. Decision Support System integrated with Geographic Information System to target restoration actions in watersheds of arid environment: A case study of Hathmati watershed, Sabarkantha district, Gujarat *J. Earth Syst. Sci.* 124 (1),

- (2015).71–86. DP Patel, **Prashant K. Srivastava**, M Gupta, N Nandhakumar
31. Performance Assessment of the SEVIRI Evapotranspiration Operational Product: Results Over Diverse Mediterranean Ecosystems. *IEEE Sensors*, (2015). DOI:10.1109/jsen.2015.2390031. GP Petropoulos, G Ireland, A Cass, **Prashant K. Srivastava**
 32. Seasonal ensemble generator for radar rainfall using copula and autoregressive model. *Stochastic Environmental Research and Risk Assessment*, (2015). 1-12. Q Dai, D Han, L Zhuo, J Zhang, T Islam, **Prashant K. Srivastava**
 33. Stratiform/convective rain delineation for TRMM microwave imager. *Journal of Atmospheric and Solar-Terrestrial Physics* 133, (2015). 25-35. T Islam, **Prashant K. Srivastava**, Q Dai, M Gupta, WZW Jaafar
 34. Synergistic multi-sensor and multi-frequency retrieval of cloud ice water path constrained by CloudSat collocations. *Journal of Quantitative Spectroscopy and Radiative Transfer* 161, (2015), 21-34, T Islam, **Prashant K. Srivastava**
 35. Impact of complexity of radar rainfall uncertainty model on flow simulation. *Atmospheric Research* 161, (2015), 93-101. Q Dai, D Han, L Zhuo, J Huang, T Islam, **Prashant K. Srivastava**
 36. Predicting Spatial and Decadal LULC Changes Through Cellular Automata Markov Chain Models Using Earth Observation Datasets and Geo-information. *Environmental Processes* 2 (1), (2015). 61-78. SK Singh, S Mustak, **Prashant K. Srivastava**, S Szabó, T Islam
 37. Validating a 1-D SVAT model in a range of USA and Australian ecosystems: evidence towards its use as a tool to study Earth's system interactions, *Geoscientific Model Development*, 8, (2015), 2437-2495, doi:10.5194/gmdd-8-2437-2015. Petropoulos, G. P., North, M. R., Ireland, G., **Prashant K. Srivastava**, and Rendall, D. V.,
 38. Evaluation of Dielectric Mixing Models for Microwave Soil Moisture Retrieval Using ComRAD passive L band radiometric measurements. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*. (2014). DOI: 10.1109/JSTARS.2014.2372031. **Prashant K. Srivastava**, Peggy O'Neill, Michael Cosh, Mehmet Kurum, Roger Lang, Alicia Joseph
 39. Assessment of Potential Climate Change Impact on Mundra Mangrove Forest Ecosystem, Gulf of Kutch, Western Coast of India: A Geospatial Perspective. *Theoretical and Applied Climatology*. (2014), DOI 10.1007/s00704-014-1206-z. **Prashant K. Srivastava**, A. Mehta, M. Gupta, S.K. Singh,
 40. Predicting Spatial and Decadal LULC Changes Through Cellular Automata Markov Chain Models Using Earth Observation Datasets and Geo-information. *Environmental Processes*. DOI: 10.1007/s40710-015-0062-x. (2015). Sudhir Kumar Singh, Sk. Mustak, **Prashant K. Srivastava**, Szilárd Szabó, Tanvir Islam
 41. A statistical significance of differences in classification accuracy of crop types using different classification algorithms. *Geocarto International*. (2015). P Kumar, R Prasad, A Choudhary, V Narayan Mishra, D Kumar Gupta, **Prashant K Srivastava**
 42. An introduction to factor analysis for radio frequency interference (RFI) detection on satellite observations, *Meteorological Applications*. DOI: 10.1002/met.1473. (2014).Tanvir Islam, **Prashant K. Srivastava** et al.,
 43. Estimation of Land Surface Temperature from atmospherically corrected LANDSAT TM image using 6S and NCEP global reanalysis product. *Environmental Earth Sciences*, DOI : 10.1007/s12665-014-3388-1. (2014). **Prashant K. Srivastava**, Dawei Han, Miguel A. Rico-Ramirez, Michaela Bray, Tanvir Islam, Manika Gupta, Qiang Dai
 44. An appraisal of the accuracy of operational soil moisture estimates from SMOS MIRAS using validated in-situ observations acquired in a Mediterranean environment. *IJRS-Remote Sensing Letters*. <http://dx.doi.org/10.1080/2150704X.2014.933277>. (2014).Petropoulos G., G. Ireland, **Prashant K. Srivastava**, P. Ioannou-Katidis,
 45. WRF dynamical downscaling and bias correction schemes for NCEP estimated Hydro-meteorological variables. *Water Resource Management*. DOI: 10.1007/s11269-015-0940-z, (2014). **Prashant K. Srivastava**, Tanvir Islam, Manika Gupta, George Petropoulos, Qiang Dai,
 46. Tracking a tropical cyclone through WRF ARW simulation and sensitivity of model physics. *Natural Hazards*. DOI: 10.1007/s11069-014-1494-8. (2014).Tanvir Islam, **Prashant K. Srivastava** et al.,
 47. Ice cloud detection from AMSU-A, MHS, and HIRS satellite instruments inferred by cloud profiling radar, *IJRS-Remote Sensing Letter (Accepted)*. (2014).Tanvir Islam, **Prashant K. Srivastava** et al.,
 48. Modelling groundwater quality over a humid subtropical region in Allahabad, India, using numerical indices, Earth Observation datasets and X-Ray Diffraction technique. *Environmental Geochemistry and Health*, DOI: 10.1007/s10653-014-9638-z. (2014).S.K. Singh, **Prashant K. Srivastava** et al.,
 49. Geochemical modeling to evaluate the mangrove forest water, *Arabian Journal of Geosciences*. DOI: 10.1007/s12517-014-1539-z. (2014). RP Kumar, RK Ranjan, Ramanathan AL, SK Singh, **Prashant K. Srivastava**
 50. Integrating TRMM and MODIS satellite with socioeconomic vulnerability for monitoring drought risk over a tropical region of India, *Physics and Chemistry of Earth (Accepted)*. (2014). Aradhana Yaduvanshi, **Prashant K. Srivastava**, AC Pandey
 51. Soil characterization based on land cover heterogeneity over a tropical landscape: An integrated approach using Earth Observation datasets. *Geocarto International*, DOI:10.1080/10106049.2014.905639. (2014).Diwakar Paudel, Jay Krishna Thakur, Sudhir Kumar Singh & **Prashant K. Srivastava**

52. The Development of Numerical Weather Models-A review. Bulletin of Environmental and Scientific Research 3 (1), (2014). 15-20. Asnor M. Ishak, **Prashant K. Srivastava**, Manika Gupta, Tanvir Islam
53. CLOUDET: A cloud detection and estimation algorithm for passive microwave imagers and sounders aided by Naive Bayes classifier and multilayer perceptron, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (accepted). (2014). Islam, T, Rico-Ramirez, MA, **Prashant K. Srivastava**, Dai, Q & Han, D
54. Land degradation severity assessment with sand encroachment in an ecologically fragile arid environment: a Geospatial Perspective. QScience Connect, <http://dx.doi.org/10.5339/connect.2013.43>. (2014). Prem Chandra Pandey, Meenu Rani, **Prashant K. Srivastava**, Laxmi Kant Sharma, Mahendra Singh Nathawat
55. An exploratory investigation of an adaptive neuro fuzzy inference system (ANFIS) for estimating hydrometeors from TRMM/TMI in synergy with TRMM/PR. Atmospheric Research 145, (2014), 57-68 Tanvir Islam, **Prashant K. Srivastava**, Miguel A. Rico-Ramirez, Qiang Dai, Dawei Han, Manika Gupta
56. Appraisal of SMOS soil moisture at a catchment scale in a temperate maritime climate. Journal of Hydrology. DOI 10.1016/j.jhydrol.2013.06.021. (2013), **Prashant K. Srivastava**, Dawei Han, Miguel A. Rico-Ramirez, Tanvir Islam,
57. Multivariate Distributed Ensemble Generator: A new scheme for ensemble radar precipitation estimation over temperate maritime climate. Journal of Hydrology, <http://dx.doi.org/10.1016/j.jhydrol.2014.01.016>, (2013), Qiang Dai, Dawei Han, Miguel A. Rico-Ramirez, **Prashant K. Srivastava**,
58. Machine learning techniques for downscaling SMOS satellite soil moisture using hydrological model and MODIS land surface temperature time series, Water Resource Management. DOI: 10.1007/s11269-013-0337-9, (2013), **Prashant K. Srivastava**, Dawei Han, Miguel A. Rico-Ramirez, Tanvir Islam
59. Uncertainty in Mesoscale model downscaled hydro-meteorological variables for discharge prediction in ungauged catchment. Hydrological Processes. DOI: 10.1002/hyp.9946. (2013). **Prashant K. Srivastava**, Dawei Han, Miguel A. Rico-Ramirez, Tanvir Islam
60. Data fusion techniques for improving soil moisture deficit using SMOS satellite and WRF-NOAH Land surface model, 2013. Water Resources Management. DOI: 10.1007/s11269-013-0452-7 (2013). **Prashant K. Srivastava**, Dawei Han, Miguel A. Rico-Ramirez, Deleen-Al Shrafany, Tanvir Islam,
61. Sensitivity associated with bright band/melting layer location on radar reflectivity correction for attenuation at C-band using differential propagation phase measurements. Atmospheric Research, 135–136, (2013), 143–158. Tanvir Islam, Miguel Rico Ramirez, Dawei Han, **Prashant K. Srivastava**,
62. Fluoride contamination mapping of groundwater in Northern India integrated with geochemical indicators and GIS. 2013, Water Science and Technology-Water Supply, doi: 10.2166/ws.2013.160 S.K. Singh, **Prashant K. Srivastava**, A C Pandey
63. Integrated assessment of groundwater influenced by a confluence river system: Concurrence with remote sensing and geochemical modeling. Water Resource Management. DOI: 10.1007/s11269-013-0408-y, (2013). S.K. Singh, **Prashant K. Srivastava**, A C Pandey, Sandeep Gautam
64. Morphometric Analysis of Upper Tons Basin from Northern Foreland of Peninsular India using CARTOSAT satellite and GIS. Geocarto International. DOI: 10.1080/10106049.2013.868043, (2013) Yadav S.K., Singh S.K., Gupta M., **Prashant K. Srivastava**
65. Non-parametric rain/no rain screening method for satellite-borne passive microwave radiometers at 19-85 GHz channels with random forests algorithm. International Journal of Remote Sensing (Accepted). (2013), Tanvir Islam, Miguel Rico Ramirez, Dawei Han, **Prashant K. Srivastava**
66. Comparative assessment of Evapotranspiration derived from NCEP and ECMWF global datasets through Weather Research and Forecasting model. Atmospheric Science Letter, DOI: 10.1002/asl.427. (2013) **Prashant K. Srivastava**, Dawei Han, Miguel A. Rico-Ramirez, Tanvir Islam,
67. Evaluation of TRMM rainfall for soil moisture prediction in a sub tropical climate, 2013. Environmental Earth Sciences. DOI: 10.1007/s12665-013-2837-6 (2013). Gupta M., **Prashant K. Srivastava**, Asnor M. Ishak, Tanvir Islam,
68. Flood hazards mitigation analysis using remote sensing and GIS: Correspondence with town planning scheme. Water Resource Management, 10.1007/s11269-013-0291-6, (2013) DP Patel and **Prashant K. Srivastava**
69. Modeling mineral phase change chemistry of groundwater in a rural-urban fringe (2012). Water Science and Technology, doi: 10.2166/wst.2012.338 (2012). S.K. Singh, **Prashant K. Srivastava**, AC Pandey, Gupta M.,
70. Appraisal of Land use/land cover of Mangrove Forest Ecosystem using Support Vector Machine. Environmental Earth Sciences. DOI: 10.1007/s12665-013-2628-0. (2013). S.K. Singh, **Prashant K. Srivastava**, J.K. Thakur, M. Gupta, S. Mukherjee,
71. Soil Chemical Changes Resulting from irrigating petrochemical effluent International Journal of Environmental Science and Technology, 9(2), 361-370, (2012) DOI: 10.1007/s13762-012-0039-5. Sharma N.K., Shaily Bhardwaj, **Prashant K. Srivastava** et al.
72. Reconstruction of contested landscape: detecting land cover transformation hosting cultural heritage sites from Central India using Remote Sensing. Land use policy. 10.1016/j.landusepol.2013.03.005, (2013) Ruman Banerjee and **Prashant K. Srivastava**,

73. "Fuzzy Logic Based Melting Layer Recognition from 3 GHz Dual Polarization Radar: Appraisal with NWP Model and Radio Sounding Observations. Theoretical and Applied Climatology. 10.1007/s00704-012-0721-z (2012).Tanvir Islam, Miguel A. Rico-Ramirez, Dawei Han, Michaela Bray, **Prashant K. Srivastava**,
74. Selection of classification techniques for land use/land cover change investigation." Advances in Space Research. 50(9), 1250-1265 (2012).**Prashant K. Srivastava**, Dawei Han, Miguel A. Rico-Ramirez, Michaela Bray, Tanvir Islam,
75. Error Correction Modelling of Wind Speed through Hydro-meteorological Parameters and Mesoscale Model: A Hybrid Approach. Water Resources Management. 10.1007/s11269-012-0130-1 (2012).Asnor M. Ishak, Renji Remesan, **Prashant K. Srivastava**, Tanvir Islam, Dawei Han
76. Performance Evaluation of the TRMM Precipitation Estimation Using Ground-based Radars from the GPM Validation Network. Journal of Atmospheric and Solar Terrestrial Physics. 77, (2012).194-208 Tanvir Islam, Miguel A. Rico-Ramirez, Dawei Han, **Prashant K. Srivastava**, Asnor M. Ishak,
77. Using S-band dual polarized radar for convective/stratiform rain indexing and the correspondence with AMSR-E GSFC profiling algorithm. Advances in Space Research. (2012).Tanvir Islam, Miguel A. Rico-Ramirez, Dawei Han, **Prashant K. Srivastava**,
78. Modeling Impact of Land Use Change Trajectories on Groundwater Quality Using Remote Sensing and GIS. Environmental Engineering and Management Journal. (2012).**Prashant K. Srivastava**, S.K. Singh, M. Gupta, J.K. Thakur, S. Mukherjee,
79. Artificial Intelligence Techniques for Clutter Identification with Polarimetric Radar Signatures. Atmospheric Research. 109-110, (2012).95-113. Tanvir Islam, Miguel A. Rico-Ramirez, Dawei Han, **Prashant K. Srivastava**,
80. Integrated framework for monitoring groundwater pollution using a geographical information system and multivariate analysis. Hydrological Sciences Journal, 57, (2012).1453-1472. **Prashant K. Srivastava**, Dawei Han, Manika Gupta, Saumitra Mukherjee,
81. A Joss-Waldvogel Disdrometer Derived Rainfall Estimation Study by Collocated Tipping Bucket and Rapid Response Rain Gauges. Atmospheric Science Letters. 13(2), (2012).139-150 Tanvir Islam, Miguel A. Rico-Ramirez, Dawei Han, **Prashant K. Srivastava**,
82. Ecological monitoring of wetlands in semi-arid region of Konya closed Basin, Turkey. Regional Environmental Change DOI: 10.1007/s10113-011-0241-x (2012).Thakur JK, **Prashant K. Srivastava**, Singh S, Vekerdy Z,
83. Prioritization of Malesari Mini-Watersheds through Morphometric Analysis: A remote sensing and GIS perspective. Environmental Earth Sciences. 10.1007/s12665-012-2086-0 (2012).D.P.Patel, Chintan A Gajjar, **Prashant K. Srivastava**
84. Water Harvesting Structure Positioning by Using Geo-Visualization Concept and Prioritization of Mini-Watersheds Through Morphometric Analysis in the Lower Tapi Basin. Journal of the Indian Society of Remote Sensing DOI: 10.1007/s12524-011-0147-6 (2012).Patel DP, Dholakia MB, Naresh N, **Prashant K. Srivastava**,
85. Mapping spatial distribution of pollutants In groundwater of a tropical area of India using Remote Sensing and GIS. Applied Geomatics, DOI 10.1007/s12518-011-0072-y (2012).**Prashant K. Srivastava**, Mukherjee S, Gupta M,
86. A Study on Distribution of Heavy Metal Contamination in the Vegetables using GIS and analytical technique. International Journal of Ecology and Development, 20, (1). (2012). **Prashant K. Srivastava** et al.
87. Characterizing Monsoonal Variation on Water Quality Index of River Mahi in India using GIS. Water Quality Exposure and Health (Springer) (DOI: 10.1007/s12403-011-0038-7) (2011)**Prashant K. Srivastava**, Mukherjee S, Gupta M, Singh S.K.
88. Integrating GIS and Remote Sensing for identification of groundwater potential zone in hilly terrain of Pavagarh, Gujarat, India. Journal "Water International" (Taylor and Francis), Vol. 35, (2010).No. 2, March 2010, 205–217 Manika Gupta and **Prashant K. Srivastava**,
89. Impact of Urbanization on Land Use/Land Cover Change using Remote Sensing and GIS: A Case Study. International Journal of Ecological Economics and Statistics, Summer 2010, Vol. 18 (10). (2010). ISSN 0973-1385 (Print); 0973-7537(Online) **Prashant K. Srivastava**, Mukherjee S, Gupta M,
90. Effect of Canal on Land Use/Land Cover using Remote Sensing And GIS. J. Indian Soc. Remote Sens.(Springer) (2009) 37: 527–537 Mukherjee S, Shashtri S, Singh C, **Prashant K. Srivastava**, Gupta M,
91. Biosorption of As(III) Ion on Rhodococcus sp.WB-12: Biomass Characterization and Kinetic Studies. Separation Science and Technology. DOI:10.1080/01496395.2011.597040, 2011. Suranjit Prasad, **Prashant K Srivastava** et al.
92. Salt tolerance assessment in Alfalfa (*Medicago sativa L.*) ecotypes.Botany Research Journal, 3 (1-4), 1-6, 2010. Nitin K Sharma, Shaily Bhardwaj, Prashant K Srivastava et al.,
93. Microbial Activity and Nutrient Status in Oak and Pine Oriented Forest Soil of Mid Altitude Central Himalaya. Journal- Gene Conserve: Vol. 9, 35, 2010, pp 29-39. **Prashant K Srivastava**
94. Qualitative and quantitative estimation of rare and dominant tree species in an urban diversity setting of Vallabh Vidyanagar campus, Gujarat. Journal-Gene Conserve: Vol. 8, 33, 2009, pp 735-742. **Prashant K Srivastava** and G Sandhya Kiran

95. Integrated water resource management using remote sensing and geophysical technique, Aravali quartzite, Delhi, India. Journal of Environmental Hydrology: Vol. 15, Paper 10, (2007) (ISSN 1058-3912) Mukherjee S, Shashtri S, Gupta M, Singh C, **Prashant K. Srivastava et al.**

BOOKS

1. Computational Intelligence Techniques in Earth and Environmental Sciences, edited by Islam, T., Prashant K. Srivastava, Gupta, M., Zhu, X., Mukherjee, S., Published by Springer Verlag, USA. ISBN 978-94-017-8642-3
2. Remote Sensing Applications in Environmental Research, edited by Prashant K. Srivastava, Mukherjee, S., Gupta, M., Islam, T., Published in Society of Earth Scientist Series, Springer Verlag, USA. ISBN 978-3-319-05905-1
3. Satellite Soil Moisture Retrieval: Techniques and Applications, edited by Prashant K. Srivastava, George Petropoulos, Yann H. Kerr, Elsevier Press, United States. ISBN: 9780128033890
4. Geospatial Technology for Water Resources Applications, edited by Prashant K. Srivastava, Dawei Han, AS Raghubanshi, Prem Pandey, Pawan Kumar. CRC Press, Taylor and Francis, USA. ISBN: 9781498719681
5. Sensitivity Analysis in Earth Observation Modelling, edited by George Petropoulos and Prashant K. Srivastava, Elsevier Press in United States. ISBN: 9780128030318

BOOK CHAPTERS

1. J K Thakur, **Prashant K. Srivastava**, Arun Pratihast, Sudhir K Singh, (2012), Estimation of evapotranspiration from wetlands using geospatial and hydro-meteorological data. Geospatial Techniques for Managing Environmental Resources (Springer) edited by Jay Krishna Thakur, Sudhir Kumar Singh, Al Ramanathan, Bala Krishna Prasad, Wolfgang Gossel.
2. George P. Petropoulos, Hywel Griffiths, Pavlos Ioannou-Katidis, **Prashant K. Srivastava**, (2014) Sensitivity Exploration of SimSphere Land Surface Model Towards its Use for Operational Products Development from Earth Observation Data. Remote Sensing Applications in Environmental Research, edited by Prashant K. Srivastava, Saumitra Mukherjee, Manika Gupta, Tanvir Islam to be appeared, Springer Verlag,
3. **Prashant K. Srivastava**, Saumitra Mukherjee, Tanvir Islam, Manika Gupta, (2014) Introduction to Remote Sensing Advancements for Environmental Applications. Remote Sensing Applications in Environmental Research, edited by Prashant K. Srivastava, Saumitra Mukherjee, Manika Gupta, Tanvir Islam, Springer Verlag, USA
4. Dhruvesh P. Patel and **Prashant K. Srivastava**, (2014) Application of Geo-Spatial Technique for Flood Inundation mapping of Low Lying Areas. Remote Sensing Applications in Environmental Research, edited by Prashant K. Srivastava, Saumitra Mukherjee, Manika Gupta, Tanvir Islam, Springer Verlag
5. Manika Gupta, **Prashant K. Srivastava**, Saumitra Mukherjee, (2014) Hyperspectral remote sensing for winter wheat crop health retrieval using multi-regression analysis and vegetation indices. Remote Sensing Applications in Environmental Research, edited by Prashant K. Srivastava, Saumitra Mukherjee, Manika Gupta, Tanvir Islam, Springer Verlag
6. Ruman Banerjee, **Prashant K. Srivastava**, (2014) Remote sensing based identification of painted rock shelter sites: Appraisal using Advanced Wide Field Sensor, Neural Network and Field Observations. Remote Sensing Applications in Environmental Research, edited by Prashant K. Srivastava, Saumitra Mukherjee, Manika Gupta, Tanvir Islam, Springer Verlag
7. Q. Dai, D. Han, MA Rico-Ramirez, **Prashant K. Srivastava**, (2016) Spatio-temporal Uncertainty Model for Radar Rainfall. In Geospatial Technology for Water Resources Applications, CRC Press, Taylor and Francis edited by Prashant K. Srivastava, Pawan Kumar, PC Pandey, Dawei Han and AS Raghubanshi.
8. **Prashant K. Srivastava** (2016) Challenges in geospatial technology for water resource development. In Geospatial Technology for Water Resources Applications, CRC Press, Taylor and Francis edited by Prashant K. Srivastava, Pawan Kumar, PC Pandey, Dawei Han and AS Raghubanshi.
9. **Prashant K. Srivastava**, Pawan Kumar, PC Pandey, Dawei Han and AS Raghubanshi (2016). Introduction to Geospatial technology for water resource development. In Geospatial Technology for Water Resources Applications,

CRC Press, Taylor and Francis edited by Prashant K. Srivastava, Pawan Kumar, PC Pandey, Dawei Han and AS Raghubanshi.

10. Sandeep Kumar Gautam, Abhay K. Singh, Jayant K. Tripathi, Sudhir Kumar Singh, **Prashant K. Srivastava**, Boini Narsimlu and Prafull Singh (2016). Appraisal of Surface and Groundwater of the Subarnarekha River Basin, Jharkhand, India: Using Remote Sensing, Irrigation Indices and Statistical Technique. In Geospatial Technology for Water Resources Applications, CRC Press, Taylor and Francis edited by Prashant K. Srivastava, Pawan Kumar, PC Pandey, Dawei Han and AS Raghubanshi.
11. **Prashant K. Srivastava** (2016). Monitoring Soil Moisture Deficit Using SMOS Satellite Soil Moisture: Correspondence through Rainfall-runoff Model. In Geospatial Technology for Water Resources Applications, CRC Press, Taylor and Francis edited by Prashant K. Srivastava, Pawan Kumar, PC Pandey, Dawei Han and AS Raghubanshi.
12. Wan Zurina Wan Jaafar, Dawei Han, **Prashant K. Srivastava** and Jia Liu (2016). A Statistical Approach for Catchment Calibration Data Selection in Flood Regionalisation. In Geospatial Technology for Water Resources Applications, CRC Press, Taylor and Francis edited by Prashant K. Srivastava, Pawan Kumar, PC Pandey, Dawei Han and AS Raghubanshi.
13. Dileep Kumar Gupta, Rajendra Prasad, **Prashant K. Srivastava**, Tanvir Islam and Manika Gupta (2016). Soil Moisture Retrieval from Bistatic Scatterometer Measurements using Fuzzy Logic System. In Geospatial Technology for Water Resources Applications, CRC Press, Taylor and Francis edited by Prashant K. Srivastava, Pawan Kumar, PC Pandey, Dawei Han and AS Raghubanshi.
14. **Prashant K. Srivastava**, Varsha Pandey, Swati Suman, Manika Gupta, Tanvir Islam (2016), Available datasets and satellites for terrestrial soil moisture estimation. In: Prashant K. Srivastava, George P. Petropoulos, Yann kerr (Editors). Satellite Soil Moisture Retrieval: Techniques and Applications, Academic Press, Elsevier, USA. ISBN: 9780128033890
15. Dileep Kumar Gupta, Rajendra Prasad, **Prashant K. Srivastava**, Tanvir Islam (2016), Non parametric model for the retrieval of soil moisture by microwave remote sensing. In: Prashant K. Srivastava, George P. Petropoulos, Yann kerr (Editors). Satellite Soil Moisture Retrieval: Techniques and Applications, Academic Press, Elsevier, USA. ISBN: 9780128033890
16. **Prashant K. Srivastava**, Tanvir Islam, Sudhir Kumar Singh, Manika Gupta, Dileep Kumar Gupta, Wan Zurina Wan Jaafar, Rajendra Prasad (2016). Soil Moisture Deficit Estimation through SMOS Soil Moisture and MODIS Land Surface Temperature. In: Prashant K. Srivastava, George P. Petropoulos, Yann kerr (Editors). Satellite Soil Moisture Retrieval: Techniques and Applications, Academic Press, Elsevier, USA. ISBN: 9780128033890
17. Y.H. Kerr, J.-P. Wigneron, A. Al Bitar, A. Mialon and **Prashant K. Srivastava** (2016). Soil Moisture from Space: Techniques and Applications. In: Prashant K. Srivastava, George P. Petropoulos, Yann kerr (Editors). Satellite Soil Moisture Retrieval: Techniques and Applications, Academic Press, Elsevier, USA. ISBN: 9780128033890
18. G.P. Petropoulos, G. Ireland, H. Griffiths, T. Islam, D. Kalivas, V. Anagnostopoulos, C. Hodges and **Prashant K. Srivastava** (2016). Spatiotemporal Estimates of Surface Soil Moisture from Space Using the Ts/VI Feature Space. In: Prashant K. Srivastava, George P. Petropoulos, Yann kerr (Editors). Satellite Soil Moisture Retrieval: Techniques and Applications, Academic Press, Elsevier, USA. ISBN: 9780128033890
19. M. Gupta, **Prashant K. Srivastava** and T. Islam (2016). Integrative Use of Near-Surface Satellite Soil Moisture and Precipitation for Estimation of Improved Irrigation Scheduling Parameters. In: Prashant K. Srivastava, George P. Petropoulos, Yann kerr (Editors). Satellite Soil Moisture Retrieval: Techniques and Applications, Academic Press, Elsevier, USA. ISBN: 9780128033890
20. **Prashant K. Srivastava**, Suman, S. and Pandey, S., 2016. Monitoring Changes in Urban Cover Using Landsat satellite Images and Demographical Information. Environmental Issues Surrounding Human Overpopulation: 89.
21. Floodplain mapping using support vector machine and Optical//Near InfraRed satellite images. New Delhi Publishers. ISBN 978-93-85503-22-1
22. Prioritization of Pahuj river basin mini-watersheds for water resource management using geospatial analysis. New Delhi Publishers. ISBN 978-93-85503-22-1

1. Morphometric analysis of Mahi River basin for water resource management using Remote Sensing and GIS. National Conference on Emerging Scenarios of Ganga, River Development & Water Resource Management, February 28th-1st March, 2017, IESD, Banaras Hindu University, India
2. Retrieval of soil moisture and vegetation properties using airborne and ground based L & S band system. L&S band Airborne SAR Proposal Evaluation Meeting & NISAR Science Workshop, 15-19 November 2016, Space Application Centre, ISRO, Ahmedabad, India
3. Crop type and stage discrimination using field spectroradiometry and hyperspectral remote sensing. AVIRIS-NG AO Proposal Evaluation Workshop, 7-8 September, 2016, Space Application Centre, ISRO, Ahmedabad, India
4. WRF-PDM: Prototype for discharge prediction in ungauged basin. Developing Hydro-Climatic Science, Information and Services for Water Management, India-UK Water Centre, 29 November-1 December 2016, IITM, Pune, India
5. Performance assessment of ERA interim solar radiation downscaled using the Weather Research and Forecasting model. National symposium on tropical meteorology, Climate Change and Coastal Vulnerability, 18-21 Dec 2016, Siksha 'O' Anusandhan University, Bhubaneswar, India
6. Rainfall forecasting using triple exponential smoothing state space model. National symposium on tropical meteorology, Climate Change and Coastal Vulnerability, 18-21 Dec 2016, Siksha 'O' Anusandhan University, Bhubaneswar, India
7. Soil erosion modelling using soil parameter and geospatial technique. National Conference on Managing Soil Resource for Environmental Sustainability: Challenges & Perspectives, 9-10 December, 2016, IESD, Banaras Hindu University, India
8. Selection of spatial interpolation techniques for soil moisture estimation, National Conference on Managing Soil Resources for Environmental Sustainability: Challenges & Perspectives, 9-10 December 2016, IESD, Banaras Hindu University, India
9. Geoscience Education- A Uniformitarianism perspective, National seminar on Golden Jubilee of Department of Geology, 27-28 January 2017, University of Delhi, Delhi
10. Combined evaluation of optical and microwave satellite dataset for soil moisture deficit estimation. Geophysical Research Abstracts, EGU General Assembly, April 17-22 April, 2016, Vienna, Austria
11. Backscattering and vegetation water content response of paddy crop at C-band using RISAT-1 satellite data. Geophysical Research Abstracts, EGU General Assembly, April 17-22 April, 2016, Vienna, Austria
12. Evaluation of radar vegetation indices for vegetation water content estimation using data from a ground-based SMAP simulator, IEEE Geoscience and Remote Sensing Symposium (IGARSS), 26-31 July 2015, Milan, Italy
13. Floodplain mapping using support vector machine and Optical//Near InfraRed satellite images. National conference on water and sustainable development, 8-9 Jan 2016, Central University of Jharkhand, Ranchi, India
14. Prioritization of Pahuj river basin mini-watersheds for water resource management using geospatial analysis. National conference on water and sustainable development, 8-9 Jan 2016, Central University of Jharkhand, Ranchi, India
15. Crop variables estimation by adaptive neuro-fuzzy inference system using bistatic scatterometer data, International Conference on Microwave and Photonics (ICMAP), 11-13 Dec 2015, Indian School of Mines ISM Dhanbad, Dhanbad, India
16. Artificial neural network with different learning parameters for crop classification using multispectral datasets, International Conference on Microwave, Optical and Communication Engineering, December 18-20, 2015, IIT Bhubaneswar, India
17. Appraisal of Weather Research and Forecasting Model Downscaling of Hydro-meteorological Variables and their Applicability for Discharge Prediction: Prognostic Approach for Ungauged Basin, AGU Fall Meeting, 2015
18. Performance of MODIS satellite and mesoscale model based land surface temperature for soil moisture deficit estimation using Neural Network. Geophysical Research Abstracts, EGU General Assembly, April 12-17th, 2015, Vienna, Austria
19. Roughness parameter optimization using Land Parameter Retrieval Model and Soil Moisture Deficit: Implementation using SMOS brightness temperatures. Geophysical Research Abstracts, EGU General Assembly, April 12-17th, 2015, Vienna, Austria
20. Towards Improving our Understanding on the Retrievals of Key Parameters Characterising Land Surface Interactions from Space: Introduction & First Results from the PREMIER-EO Project. Geophysical Research Abstracts, EGU General Assembly, April 12-17th, 2015, Vienna, Austria
21. On modelling Land Surface Interactions using SVAT modelling: Results from the Global Validation of SimSphere. Geophysical Research Abstracts, European Geosciences Union, April 12-17th, 2015, Vienna, Austria.
22. Towards Improving our Understanding on the Retrievals of Key Parameters Characterising our Planet's Water Cycle from Space: the work done within the PREMIER-EO Project. 36th International Symposium on Remote Sensing of Environment, May 11-15th, 2015, Berlin, Germany.
23. Seasonal parameterizations of the tau-omega model using the ComRAD ground-based SMAP simulator, IEEE Geoscience and Remote Sensing Symposium (IGARSS), 13-18 July 2014, Quebec, Canada

24. Performance Evaluation Of SMOS Soil Moisture Retrieval Parameters For Hydrological Application, 11th International Conference on Hydroinformatics HIC 2014, New York City, USA
25. Symposium on HypSIIRI: Enabling the Evolution of Land Imaging with New Approaches and Products, HypSIIRI, Product Symposium, June 4-5, 2014, Sponsored by NASA Goddard Space Flight Center, Greenbelt, USA
26. Exploring the Influence of Topographic Correction and SWIR Spectral Information Inclusion on Burnt Scars Detection From High Resolution EO Imagery: A Case Study Using ASTER imagery. Geophysical Research Abstracts Vol. 16, EGU2014-15018, EGU General Assembly 2014
27. Sensitivity and uncertainty analysis of estimated soil hydraulic parameters for simulating soil water content. Geophysical Research Abstracts, Vol. 16, EGU2014-14822, EGU General Assembly 2014
28. GPM Applications Workshop, NOAA Centre for climate and weather prediction, 12-13 November 2013, University of Maryland, College Park, Maryland.
29. Artificial Intelligence Techniques for Downscaling SMOS Soil Moisture using MODIS Land Surface Temperature, SMOS and Aquarius science workshop, 15- 17 April, 2013, IFREMER, Brest, France
30. Data fusion techniques for improved soil moisture retrieval using SMOS and WRF-NOAH Land surface model, SMOS land application workshop, 25-27 February 2013, ESA-ESRIN, Frascati, Italy
31. Assessment of SMOS satellite derived soil moisture for soil moisture deficit estimation. Prediction in Ungauged basin (PUBS) symposium 22-25 October 2012 on co-organized by Delft University of Technology, Delft, Netherlands and IAHS.
32. Ensemble of bagged decision trees to discriminate rain/no rain status from the TRMM Microwave Imager. The 4th TRMM and GPM International Science Conference by Tanvir Islam, Miguel A. Rico-Ramirez, Prashant K. Srivastava, November 2012. Tokyo, Japan
33. Assessment of TRMM rainfall for vertical soil moisture prediction: Implication through HYDRUS 1D. The 4th TRMM and GPM International Science Conference by Manika Gupta, Prashant K. Srivastava, Tanvir Islam, November 2012. Tokyo, Japan
34. Evaluation of TRMM rainfall for soil moisture prediction in a sub tropical climate. Prediction in Ungauged basin (PUBS) symposium 22-25 October 2012 on co-organized by Delft University of Technology, Delft, Netherlands and IAHS.
35. Measuring Winter Wheat Cultivar (*Triticum aestivum* L.) Health Status Using Hyperspectral Reflectance Data. *ISPRS Journal of Photogrammetry and Remote Sensing Archives XXXVIII-8/W3 Workshop Proceedings* (ISSN 1682-1750). <http://www.isprs.org/proceedings/XXXVIII/8-W3/Contents.html>
36. Groundwater quality assessment and its relation to land use/land cover using remote sensing and GIS. International Conference on Groundwater-08 on, organized by Rajasthan University, March 19-22, 2008, Jaipur, India.
37. Cotton crop health assessment in a part of Punjab using multi spectral satellite data. National seminar on “New Frontiers in Life Sciences” Dated 19th Dec 2009 organized by NVPAS, Vallabh Vidyanagar, Anand, Gujarat, India.
38. Participated in National Seminar “Enviro-Next 2009” organized by C U Shah college, Ahmedabad, India.
39. Remote Sensing and GIS as an Application for Land Use/Land Cover Monitoring. XXII Gujarat Science Congress-2008 at Bhavnagar, Gujarat, India (2008)
40. Searching missing links of conservation and management for sustainable development of the environment. National symposium, SES, JNU, New Delhi, (2007)
41. Effect of canal on land use/land cover using remote sensing, New Horizons in Biosciences. National Seminar, organized by NVPAS, S P University and GSBTM, Anand, Gujarat, India (2007)

INVITED TALKS

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- Microwave Satellite Soil Moisture Retrieval using the L band Brightness Temperature and Radar Backscatters
 - URSI workshop at International Centre for Radio Science sponsored by IEEE GRSS and Indian Meteorological Society, Jodhpur, India, 2015
 - Drought assessment using L band microwave datasets, Regional Remote Sensing Centre, ISRO, Jodhpur, India, 2015
 - Soil moisture retrieval using active and passive microwave remote sensing, Centre for Earth Sciences, Indian Institute of Sciences, Bangalore, India, 2015
 - L band passive microwave soil moisture retrieval algorithm, NASA GSFC, Greenbelt, Maryland, USA, 2014
 - Assessment of Mesoscale model for SMD and Runoff prediction, Department of Geography, University of Bristol, UK, Bristol, UK, 2012
 - Repossession of Land Surface Temperature through precipitable water vapour corrected LANDSAT TM image, Department of Civil Engineering, University of Bristol, UK, Bristol, UK, 2011
 - ArcGIS for ground water pollution modelling, ArcGIS forum, Department of Geography, University of Bristol, UK, Bristol, UK, 2011

KEY MEETINGS

- Journal of Earth System Science Editorial Board Meeting, Indian Academy of Science, Bangalore, India
- Development of Urban Meteorology-Meso-Networks, Urban Modelling and Prediction of Urban Floods in India, at IITM, Pune, India
- Meeting on Urban flooding and Hydrological Information System, IITM, Pune, India
- NASA hydrological sciences group meetings, NASA GSFC, Greenbelt, Maryland, USA, 2013-2015
- GPM group meetings, NOAA, College Park, Maryland, USA, 2013-2015
- SMAP mission science meeting, NASA JPL and GFSC, 2013-2015 (Telemeetings)
- Impact of Blockage on Flood Risk. A meeting of the British Hydrological Society South West Section. British Hydrological Society, Department of Civil Engineering, University of Bristol, Bristol, UK, 2012
- Hydrology group meeting, Department of Civil Engineering, University of Bristol, Bristol, UK from 2012-13
- Meeting on Surface Water Management Plans, Joint British Hydrological Society (BHS) and Chartered Institution of Water and Environmental Management (CIWEM) meeting at University of Bristol, 2012
- ArcGIS meeting, Department of Geography, University of Bristol, Bristol, UK
- Meeting on Flood forecasting for rapid response catchments, British Hydrological Society, Department of Civil Engineering, University of Bristol, Bristol, UK, 2010
- Meeting on Remote sensing & flooding, British Hydrological Society, School of Geographical Sciences, University of Bristol, Bristol, UK, 2010
- General Body Meeting of Indian Society of Geomatics, Vikram Hall, Space Application Centre (SAC), Ahmedabad, India, 2010